PRINTHEAD-TO-PLATEN SPACING VARIATION ALONG SCAN AXIS DUE TO CARRIAGE GUIDE, MEASURED BY SIMPLE SENSOR ON CARRIAGE

ABSTRACT OF THE DISCLOSURE

PPS variation along a scan axis is found by shining a light beam from pen carriage to print-medium position and back to detector, and applying a pathlength/intensity correlation. Sensing is done while scanning, to find relative PPS profile along the track. With no medium in place this measures mechanical imperfections — and can be corrected by later deducting thickness of a medium. If medium is present, adjustment is omitted. For absolute values a plural-lamp sensor is calibrated for each lamp, at the PPS design point. Pagewide/webwide variants are included.